



Water-Data Report NV-2005

10300000 WEST WALKER RIVER NEAR HUDSON, NV

WALKER RIVER BASIN, WEST WALKER RIVER BASIN

LOCATION.--Lat 38°48'35", long 119°13'35" referenced to North American Datum of 1927, in SE ¼ SW ¼ sec.18, T.11 N., R.25 E., Lyon County, Hydrologic Unit 16050302, on left bank, 0.5 mi upstream from Wilson Canyon, and 3 mi southeast of Hudson.

DRAINAGE AREA.--964 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Aug 1914 to Mar 1925, Jan 1947 to Sep 1978, Apr 1979 to Sep 1994, (irrigation season only) Oct 1994 to current year. Aug 1914 to Apr 1921 published as "at Hudson."

GAGE.--Water-stage recorder. Prior to May 1921, nonrecording gage at site 2.5 mi upstream at different datum. May 1921 to Mar 1925, water-stage recorder at approximately same site at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by off-channel storage in Topaz Lake (station 10297000) since Jan 30, 1922. Many diversions above station for irrigation. Station is below return flow from irrigated areas in Smith Valley.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s, Jan 3, 1997, gage height, 12.18 ft; minimum daily, 10 ft³/s, Jan 23, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,990 ft³/s, May 30, gage height, 4.90 ft; minimum daily discharge, 21 ft³/s, Oct 16.

10300000 WEST WALKER RIVER NEAR HUDSON, NV—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	40	39	e32	35	36	49	122	245	1,270	792	149	175
2	38	34	32	e35	35	50	122	253	1,470	899	169	161
3	32	31	e31	34	35	53	131	258	1,460	1,050	172	138
4	33	28	e30	35	35	56	138	270	1,500	1,070	154	155
5	38	26	29	35	36	68	139	277	1,160	1,020	155	178
6	37	26	32	35	38	68	135	286	1,150	944	149	171
7	39	25	e34	37	42	68	130	275	1,040	920	119	167
8	39	26	e36	38	45	70	137	268	955	951	114	171
9	36	26	38	e39	49	73	143	274	828	955	99	143
10	36	24	36	e39	49	76	141	280	565	939	152	189
11	36	25	35	40	47	82	140	272	540	921	165	169
12	35	26	35	e41	48	84	140	261	480	842	140	174
13	33	26	35	42	49	92	132	246	491	752	142	172
14	22	26	37	e40	50	98	114	227	519	719	147	176
15	22	26	38	e39	45	99	122	237	704	682	160	198
16	21	26	38	38	42	98	133	252	1,070	645	185	184
17	23	26	36	39	42	100	121	470	1,470	591	192	164
18	23	26	38	37	49	99	114	572	1,600	560	192	161
19	23	26	35	37	55	101	120	584	1,560	476	177	174
20	28	25	34	37	51	111	195	844	1,430	431	175	177
21	31	25	34	38	46	117	204	1,280	984	355	169	164
22	34	25	33	38	51	123	186	1,580	771	371	150	144
23	32	25	e33	38	67	e120	175	1,610	671	372	149	125
24	35	24	e33	38	57	e100	190	1,430	674	286	177	125
25	38	26	e33	38	49	e90	189	1,100	684	266	174	123
26	40	29	33	38	45	85	197	933	666	242	187	125
27	42	31	32	39	44	85	199	905	637	184	191	129
28	40	32	33	37	43	83	231	1,310	685	138	166	113
29	40	e32	34	37	---	97	234	1,600	700	114	155	142
30	38	e32	35	37	---	110	232	1,900	732	123	165	149
31	37	---	36	36	---	120	---	1,750	---	136	167	---
Total	1,041	824	1,060	1,166	1,280	2,725	4,706	22,049	28,466	18,746	4,957	4,736
Mean	33.6	27.5	34.2	37.6	45.7	87.9	157	711	949	605	160	158
Max	42	39	38	42	67	123	234	1,900	1,600	1,070	192	198
Min	21	24	29	34	35	49	114	227	480	114	99	113
Ac-ft	2,060	1,630	2,100	2,310	2,540	5,410	9,330	43,730	56,460	37,180	9,830	9,390

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	71.1	63.1	69.2	79.3	87.0	98.6	210	441	589	355	170	107
Max	203	178	493	1,064	527	450	528	1,231	1,718	1,490	568	290
(WY)	(1917)	(1951)	(1951)	(1997)	(1997)	(1969)	(1982)	(1997)	(1983)	(1995)	(1983)	(1983)
Min	21.7	20.8	20.7	22.0	26.1	30.3	56.9	92.1	86.4	55.8	14.6	14.7
(WY)	(1978)	(1962)	(1962)	(1962)	(1961)	(1961)	(1922)	(1977)	(1924)	(1924)	(1920)	(1920)

10300000 WEST WALKER RIVER NEAR HUDSON, NV—Continued**SUMMARY STATISTICS**

	Calendar Year 2004		Water Year 2005		Water Years 1915 - 2005	
Annual total	41,951		91,756			
Annual mean	115		251		197	
Highest annual mean					435	1997
Lowest annual mean					56.4	1977
Highest daily mean	397	May 30	1,900	May 30	4,230	Jan 3, 1997
Lowest daily mean	21	Oct 16	21	Oct 16	10	Jan 23, 1962
Annual seven-day minimum	23	Oct 14	23	Oct 14	13	Aug 7, 1920
Maximum peak flow			1,990	May 30	11,400	Jan 3, 1997
Maximum peak stage			4.90	May 30	12.18	Jan 3, 1997
Annual runoff (ac-ft)	83,210		182,000		142,700	
10 percent exceeds	297		843		435	
50 percent exceeds	53		114		99	
90 percent exceeds	29		32		33	

10300000 WEST WALKER RIVER NEAR HUDSON, NV—Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Part 1 of 4

[Remark codes: <, less than.]

Date	Time	Sample type	Calcium bed sediment	Magnesium bed sediment	Potassium bed sediment	Sodium bed sediment	Sulfur, bed sed wet svd field, total, percent	Phosphorus bed sediment	Total carbon, bed sed wsv nat	Organic carbon, bed sed wsv nat	Aluminum, bed sediment	Antimony, bed sed wet svd
			mg/kg (00917)	mg/kg (00924)	mg/kg (00938)	mg/kg (00934)	(34970)	mg/kg (00668)	percent (49267)	ug/g (49266)	ug/g (01108)	ug/g (34795)
Apr 26...	0900	Bed material	23,000	13,000	18,000	17,000	.07	1,400	1.6	1.6	79,000	1.6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Part 2 of 4

[Remark codes: <, less than.]

Date	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)	Beryllium, bed sed <62.5um wet svd field, total, ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chromium, bed sed <62.5um wet svd field, fld,tot ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Lanthanum, bed sed <62.5um wet svd field, total, ug/g (01170)	Lead, bed sed <62.5um wet svd field, total, ug/g (34885)	
Apr 26...	19	1,000	2.0	.330	.220	74	48	15	48	19	42,000	34	21

WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Part 3 of 4

[Remark codes: <, less than.]

Date	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Manganese, bed sed <62.5um wet svd field, total, ug/g (34905)	Mercury bed sed <62.5um wet svd field, total, ug/g (34910)	Molybdenum, bed sed <62.5um wet svd field, total, ug/g (34915)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium, bed sed <62.5um wet svd field, total, ug/g (34930)	Scandium, bed sed <62.5um wet svd field, total, ug/g (34945)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Strontium, bed sed <62.5um wet svd field, fld,tot ug/g (34965)	Tantulum, bed sed <62.5um wet svd dry svd fld,tot ug/g (34975)	Thallium, bed sed <62.5um wet svd total, ug/g (04064)	Thorium, bed sed <62.5um wet svd field, total, ug/g (34980)	Titanium, bed sediment <62.5um total, ug/g (01153)
Apr 26...	41	1,200	.04	1.4	23	15	13	<3	540	1.1	.600	16	6,600

10300000 WEST WALKER RIVER NEAR HUDSON, NV—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Part 4 of 4

[Remark codes: <, less than.]

Date	Vanad- ium, bed sed <62.5um <62.5um wet svd wet svd fld,tot	Yttrium bed sed <62.5um wet svd field, total,	Zinc, bed sed <62.5um wet svd field, total,	Alpha radio- actvty	Gross beta	Ra-226, Cs-137,	Ra-228, sedimnt	Uranium bed sed <62.5um wet svd field, total,
	ug/g (35005)	ug/g (35010)	ug/g (35020)	pCi/g (04125)	pCi/g (49962)	pCi/g (09507)	pCi/g (75977)	ug/g (35000)
Apr 26...	120	20	100	24	32	.9	1.1	6.5